Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Balancing Chemical Equations Homework #1**

*Balance the following equations!*

STEPS:

1. Determine the number of atoms of each element for the reactants and products.
2. Balance elements one at a time by adding **COEFFICIENTS**.

* NEVER EVER change the subscripts, only the coefficients.

1. Every time you add coefficients, go back and re-count the number of atoms of each element.
2. Check each element to make sure that there is the same number on each side of the equation.
3. **\_\_\_\_\_\_\_ H2 + \_\_\_\_\_\_\_ Cl2 🡪 \_\_\_\_\_\_\_ HCl**

|  |  |
| --- | --- |
| Left Side | Right Side |
| H:  Cl: | H:  Cl: |

1. **\_\_\_\_\_\_\_ Na + \_\_\_\_\_\_\_ O2 🡪 \_\_\_\_\_\_\_ Na2O**

|  |  |
| --- | --- |
| Left Side | Right Side |
| Na:  O: | Na:  O: |

1. **\_\_\_\_\_\_\_ Zn + \_\_\_\_\_\_\_ HCl 🡪 \_\_\_\_\_\_\_ ZnCl2 + \_\_\_\_\_\_\_ H2**

|  |  |
| --- | --- |
| Left Side | Right Side |
| Zn:  H:  Cl: | Zn:  H:  Cl: |

1. **\_\_\_\_\_\_\_ KIO3 🡪 \_\_\_\_\_\_\_ KI + \_\_\_\_\_\_\_ O2**

|  |  |
| --- | --- |
| Left Side | Right Side |
| K:  I:  O: | K:  I:  O: |

1. **\_\_\_\_\_\_\_ Na2O+ \_\_\_\_\_\_\_ F2 🡪 \_\_\_\_\_\_\_ NaF + \_\_\_\_\_\_\_ O2**

|  |  |
| --- | --- |
| Left Side | Right Side |
| Na:  O:  F: | Na:  O:  F: |

1. **\_\_\_\_\_\_\_ NH3 + \_\_\_\_\_\_\_ O2 🡪 \_\_\_\_\_\_\_ N2 + \_\_\_\_\_\_\_ H2O**

|  |  |
| --- | --- |
| Left Side | Right Side |
| N:  H:  O: | N:  H:  O: |

1. **\_\_\_\_\_\_\_ C + \_\_\_\_\_\_\_ SO2 🡪 \_\_\_\_\_\_\_ CS2 + \_\_\_\_\_\_\_ CO**

|  |  |
| --- | --- |
| Left Side | Right Side |
| C:  S:  O: | C:  S:  O: |

1. **\_\_\_\_\_\_\_ H2CO3 🡪 \_\_\_\_\_\_\_ H2O + \_\_\_\_\_\_\_\_ CO2**

|  |  |
| --- | --- |
| Left Side | Right Side |
| H:  C:  O: | H:  C:  O: |

1. **\_\_\_\_\_\_\_ C3H8 + \_\_\_\_\_\_\_ O2 🡪 \_\_\_\_\_\_\_ CO2 + \_\_\_\_\_\_\_ H2O**

|  |  |
| --- | --- |
| Left Side | Right Side |
| C:  H:  O: | C:  H:  O: |